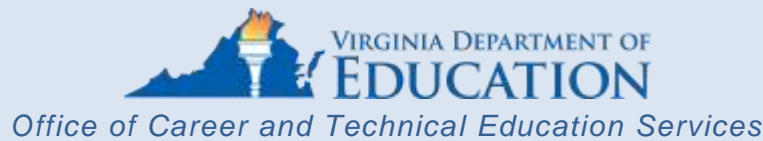


# Governor's STEM Academy Brief



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The purpose of this monthly brief is to provide information, resources, and a networking vehicle to support the STEM (science, technology, engineering, and mathematics) Academies in Virginia.

## GOVERNOR'S STEM ACADEMIES SPOTLIGHT

The Landstown High School's Governor's STEM Academy and the school's Technology Academy, Virginia Beach, has been awarded a Dominion Resources/Dominion Foundation educational grant of \$1,000.00 to support the newly formed FIRST Robotics team. Dr. Jim Barger, STEM Engineering Department Chairman, will take the lead as both the FIRST Robotics and FIRST Tech Challenge (FTC) sponsor. This new partnership between the Dominion Foundation and the new Robotics Focus is an example of the innovative programs that the Governor's STEM Academy is offering to the students of Virginia Beach Public Schools.

## CAREER LINKS—ARCHITECTURE AND CONSTRUCTION

- Employment in the Architecture and Construction [Career Cluster](#) is expected to grow faster than average over the next decade. The Bureau of Labor Statistics (BLS) estimates that nationwide employment in Architecture and Construction occupations was just over 9 million in 2010 and expects employment to grow to just over 11 million in 2020. This represents the addition of two million new jobs and an increase in employment of 22 percent, making Architecture and Construction one of this decade's fastest growing pathways.
- Explore [Architectural Record's](#) links to find articles such as [Sheltering the World](#), [Practice Matters](#), and [Diversity in Design: The Diversity Pipeline](#), as well as [Green Building Project Search](#).
- [Architect](#), the magazine of the American Institute of Architects, includes resources on sustainability and ecology as related to building design and construction.
- Visit the U.S. Department of Energy's [Building Technologies Office](#) for emerging technologies in energy efficiency and renewability within the residential and commercial building sectors.
- National Association of Women in Construction offers links to [NAWIC Career Center](#), [Educational Opportunities and Scholarship Information](#), and [Articles from The NAWIC Image](#).
- The U.S. Green Building Council site includes information on [LEED](#) rating systems and certifications, as well as many other resources (such as *Practical Strategies in Green Building*: [Existing Offices](#), [Hotels](#), and [Retail](#); and ["Targeting 101! A National High-Performance Hospital Model"](#)).
- Career resources for the Architecture and Construction Career Cluster include [Career Paths in Civil Engineering](#), [ARCHcareers.org](#), [Build Your Future](#), [American Planning Association: GROW](#), [Considering a Career in Construction Management?](#), [Construct My Future](#), [Occupational Outlook Handbook: Electrical](#)

and [Electronic Engineering Technicians](#), and [Virginia CareerVIEW](#).

- [Careers in Construction](#) offers information, chats, essay contests, and a construction career [FAQ](#).

## GRANTS AND OPPORTUNITIES

- [The American Institute of Architects](#) offers a listing of scholarships and opportunities for students attending various schools of architecture.
- The SkillsUSA National Leadership and Skills Conference was held in Kansas City June 24-28th. Amy Wood, an Architectural Drafting student of Bobby Jett, Stafford Senior High School, was the Gold Medalist winning first place in the Architectural Drafting contest. Nathan Lewis, a Carpentry student of Neil Tucker at the Massanutten Technical Center, was the Bronze Medalist winning third place in the Carpentry contest.

## INSTRUCTIONAL STRATEGIES

- Career and Technical Education at the University of North Texas offers lessons plans for courses in the Architecture and Construction Career Cluster: [Principles of Architecture](#), [Architectural Design](#), [Construction Management](#), [Construction Technology](#), and [Drafting](#).
- Sample teaching resources for the Architecture and Construction Career Cluster include [Architecture and Construction: Stair Construction](#), [Civil Engineering and Architecture \(Green Sustainable Construction Project\)\(CITEP\)](#), [Building Big](#), and [Architectural Design 1 Model](#).
- Visit the American Society of Interior Designers [Knowledge Center](#) (e.g., links on [Aging & Accessibility](#), [Sustainable Design](#), and [Case Studies](#)) and [For Educators](#) (design projects and teaching resources).
- For a guide on how small businesses can comply with the 2010 ADA Standards for Accessible Design, go to [ADA Update: A Primer for Small Business](#).
- The updated [Steel Bridge Design Handbook](#) is available for free download from the National Steel Bridge Alliance.
- [National Center for Construction Education and Research](#) is a 501 (c) (3) established by the construction and industrial maintenance industries to standardize craft, safety, and management education curricula related to educating individuals of all ages.
- [BobVila.com](#) is the Web site of Bob Vila, host of the popular home remodeling TV show--Home Again and the site allows you to explore resources and how-to information and to ask Bob for answers!

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